

L Number	Hits	Search Text	DB	Time stamp
7	3	(("6,356,884") or ("5,659,666") or ("6,418,424")).PN.	USPAT; US-PGPUB	2004/08/22 23:03



Welcome
United States Patent and Trademark Office

IEEE Xplore®
1 Million Documents
1 Million Users

» Search Results

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)

Quick Links

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards


Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

© 2000 Blackwell Science Ltd

-  Access the
IEEE Enterprise
File Cabinet

 Print Form

Your search matched **19** of **1062489** documents.

A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

training<and>task<and>state <and> predict <and> new

Search

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 A performance comparison of TRACA - an incremental on-line learning algorithm

Mitchell, M.W.;

Neural Networks, 2003. Proceedings of the International Joint Conference
on , Volume: 3 , 20-24 July 2003
Pages:1897 - 1902 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(538 KB\)\]](#) **IEEE CNF**

2 Training recurrent networks using the extended Kalman filter

Williams, R.J.;

Williams, R.S.,
Neural Networks, 1992. IJCNN., International Joint Conference on , Volume: 4 , 7-11 June 1992

Pages:241 - 246 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(452 KB\)\]](#) [IEEE CNF](#)

3 Application of PCA method to weather prediction task

Jaruszewicz, M.; Mandziuk, J.;

Neural Information Processing, 2002. ICONIP '02. Proceedings of the 9th International Conference on , Volume: 5 , 18-22 Nov. 2002
Pages:2359 - 2363 vol.5

[\[Abstract\]](#) [\[PDF Full-Text \(592 KB\)\]](#) **IEEE CNF**

4 Predicting the threshold of pulse-train electrical stimuli using a stochastic auditory nerve model: the effects of stimulus noise

Yifang Xu; Collins, L.M.;

Biomedical Engineering, IEEE Transactions on , Volume: 51 , Issue: 4 , April 2004
Pages:590 - 603

[\[Abstract\]](#) [\[PDF Full-Text \(528 KB\)\]](#) [IEEE JNL](#)

5 Finite-state residual vector quantization using a tree-structured competitive neural network

Rizvi, S.A.; Nasrabadi, N.M.;

Circuits and Systems for Video Technology, IEEE Transactions on , Volume: 7 , Issue: 2 , April 1997
Pages:377 - 390

[\[Abstract\]](#) [\[PDF Full-Text \(1784 KB\)\]](#) [IEEE JNL](#)

6 Using artificial neural networks for classifying ICU patient states

Van Gils, M.; Jansen, H.; Nieminen, K.; Summers, R.; Weller, P.R.;

Engineering in Medicine and Biology Magazine, IEEE , Volume: 16 , Issue: 6 , Nov.-Dec. 1997
Pages:41 - 47

[\[Abstract\]](#) [\[PDF Full-Text \(1464 KB\)\]](#) [IEEE JNL](#)

7 Linear and neural network feedback for flight control decoupling

Steck, J.E.; Rokhsaz, K.; Shyh-Pyng Shue;

Control Systems Magazine, IEEE , Volume: 16 , Issue: 4 , Aug. 1996
Pages:22 - 30

[\[Abstract\]](#) [\[PDF Full-Text \(1452 KB\)\]](#) [IEEE JNL](#)

8 Predicting sun spots using a layered perceptron neural network

Park, Y.R.; Murray, T.J.; Chung Chen;

Neural Networks, IEEE Transactions on , Volume: 7 , Issue: 2 , March 1996
Pages:501 - 505

[\[Abstract\]](#) [\[PDF Full-Text \(528 KB\)\]](#) [IEEE JNL](#)

9 Nonlinear Fisher discriminant using kernels

Guttman, O.; Meir, R.;

Electrical and Electronic Engineers in Israel, 2000. The 21st IEEE Convention of the , 11-12 April 2000
Pages:257 - 260

[\[Abstract\]](#) [\[PDF Full-Text \(160 KB\)\]](#) [IEEE CNF](#)

10 Pattern selection strategies for a neural network-based short term air pollution prediction model

Boznar, M.;

Intelligent Information Systems, 1997. IIS '97. Proceedings , 8-10 Dec. 1997
Pages:340 - 344

[\[Abstract\]](#) [\[PDF Full-Text \(488 KB\)\]](#) [IEEE CNF](#)

11 Robustness of a chaotic modal neural network applied to audio-visual speech recognition

Kabre, H.;

[\[Abstract\]](#) [\[PDF Full-Text \(464 KB\)\]](#) **IEEE CNF**

Fuzzy Systems, 2003. FUZZ '03. The 12th IEEE International Conference on , Volume: 2 , 25-28 May 2003
Pages:1068 - 1073 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(447 KB\)\]](#) **IEEE CNF**

Multimodal Interfaces, 2002. Proceedings. Fourth IEEE International Conference on , 14-16 Oct. 2002
Pages:149 - 154

[\[Abstract\]](#) [\[PDF Full-Text \(354 KB\)\]](#) **IEEE CNF**

Intelligent Processing and Manufacturing of Materials, 1999. IPMM '99. Proceedings of the Second International Conference on , Volume: 2 , 10-15 July 1999
Pages:773 - 778 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(308 KB\)\]](#) **IEEE CNF**

Engineering in Medicine and Biology Society, 1998. Proceedings of the 20th Annual International Conference of the IEEE , Volume: 3 , 29 Oct.-1 Nov. 1998
Pages:1385 - 1388 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(300 KB\)\]](#) **IEEE CNF**

1 2 Next

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)
IEEE Xplore
RELEASE 1.8

 Welcome
 United States Patent and Trademark Office

IEEE Xplore®
 1 Million Documents
 1 Million Users

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)
[» Search Results](#)

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

 Your search matched **19** of **1062489** documents.

 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

16 **Constructive theory refinement in knowledge based neural networks**

Parekh, R.; Honavar, V.;

Neural Networks Proceedings, 1998. IEEE World Congress on Computational Intelligence. The 1998 IEEE International Joint Conference on , Volume: 3 , 4-9 May 1998

Pages:2318 - 2323 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(596 KB\)\]](#) **IEEE CNF**

17 **Self-structuring hidden control neural models**

Sorensen, H.B.D.; Hartmann, U.;

Neural Networks for Signal Processing [1992] II., Proceedings of the 1992 IEEE-SP Workshop , 31 Aug.-2 Sept. 1992

Pages:149 - 156

[\[Abstract\]](#) [\[PDF Full-Text \(292 KB\)\]](#) **IEEE CNF**

18 **Self-structuring hidden control neural model for speech recognition**

Sorensen, H.B.D.; Hartmann, U.;

Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE International Conference on , Volume: 2 , 23-26 March 1992

Pages:353 - 356 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(280 KB\)\]](#) **IEEE CNF**

19 **A proposal for indicating quality of generalization when evaluating ANNs**

Lendaris, G.G.;

Neural Networks, 1990., 1990 IJCNN International Joint Conference on , 17-21 June 1990

Pages:709 - 713 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(356 KB\)\]](#) IEEE CNF

[Prev](#) [1](#) [2](#)

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [Online Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to](#)

Copyright © 2004 IEEE — All rights reserved



US Patent & Trademark Office

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

training and task and state and hypothetical and predict and neural



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

training and task and state and hypothetical and predict and neural

Found 48,610 of 141,345

 Sort results
by

relevance

 Display
results

expanded form


[Save results to a Binder](#)

[Search Tips](#)
☐ Open results in a new window

[Try an Advanced Search](#)
[Try this search in The ACM Guide](#)

Results 1 - 20 of 200

 Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

 Relevance scale ☐ ☐ ☐ ☐ ☐

1 [Fast detection of communication patterns in distributed executions](#)

Thomas Kunz, Michiel F. H. Seuren

 November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research**

 Full text available: [pdf\(4.21 MB\)](#)

 Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

2 [Technique for automatically correcting words in text](#)

Karen Kukich

 December 1992 **ACM Computing Surveys (CSUR)**, Volume 24 Issue 4

 Full text available: [pdf\(6.23 MB\)](#)

 Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Research aimed at correcting words in text has focused on three progressively more difficult problems: (1) nonword error detection; (2) isolated-word error correction; and (3) context-dependent word correction. In response to the first problem, efficient pattern-matching and n-gram analysis techniques have been developed for detecting strings that do not appear in a given word list. In response to the second problem, a variety of general and application-specific spelling cor ...

Keywords: n-gram analysis, Optical Character Recognition (OCR), context-dependent spelling correction, grammar checking, natural-language-processing models, neural net classifiers, spell checking, spelling error detection, spelling error patterns, statistical-language models, word recognition and correction


3 [Supervised adaptive resonance networks](#)

R. S. Baxter

 May 1991 **Proceedings of the conference on Analysis of neural network applications**

 Full text available: [pdf\(1.44 MB\)](#)


 Additional Information: [full citation](#), [references](#), [index terms](#)

- 4 Text categorization for multi-page documents: a hybrid naive Bayes HMM approach 
 Paolo Frasconi, Giovanni Soda, Alessandro Vullo
 January 2001 **Proceedings of the first ACM/IEEE-CS joint conference on Digital libraries**

Full text available:  pdf(280.05 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


Text categorization is typically formulated as a concept learning problem where each instance is a single isolated document. In this paper we are interested in a more general formulation where documents are organized as page sequences, as naturally occurring in digital libraries of scanned books and magazines. We describe a method for classifying pages of sequential OCR text documents into one of several assigned categories and suggest that taking into account contextual information provided ...


Keywords: hidden Markov models, multi-page documents, naive Bayes classifier, text categorization

- 5 Artificial neural networks as cognitive tools for professional writing 
 Patricia A. Carlson
 September 1990 **ACM SIGDOC Asterisk Journal of Computer Documentation ,
 Proceedings of the 8th annual international conference on Systems
 documentation**, Volume 14 Issue 4


Full text available:  pdf(1.35 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


Computers are cognitive tools — they extend the capabilities of the human mind. Paper and pencil are also cognitive tools — they enhance human memory by acting as a permanent record, and they mediate the formation of thought by serving as a scratchpad or rehearsal device. However, there is a qualitative difference between these cognitive tools: the computer as a writing environment can become an active participant in the process while paper and pencil must ...

- 6 Construction of an artificial neural network for simple exponential smoothing in forecasting 
 Doug W. Mahoney, Ruey-Pyng Lu, Shaun-inn Wu
 April 1994 **Proceedings of the 1994 ACM symposium on Applied computing**

Full text available:  pdf(530.71 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: adaptive simple exponential smoothing, artificial neural network, simple exponential smoothing

- 7 Context-sensitive learning methods for text categorization 
 William W. Cohen, Yoram Singer
 April 1999 **ACM Transactions on Information Systems (TOIS)**, Volume 17 Issue 2

Full text available:  pdf(256.75 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Two recently implemented machine-learning algorithms, RIPPER and sleeping-experts for phrases, are evaluated on a number of large text categorization problems. These algorithms both construct classifiers that allow the "context" of a word w to affect how (or even whether) the presence or absence of w will contribute to a classification. However, RIPPER and sleeping-experts differ radically in many other respects: ...

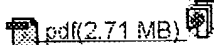
Keywords: context-sensitive models, mistake-driven algorithms, on-line learning, rule learning, text categorization

8 Discourse segmentation by human and automated means

Rebecca J. Passonneau, Diane J. Litman

March 1997 **Computational Linguistics**, Volume 23 Issue 1

Full text available:



Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

[Publisher Site](#)

The need to model the relation between discourse structure and linguistic features of utterances is almost universally acknowledged in the literature on discourse. However, there is only weak consensus on what the units of discourse structure are, or the criteria for recognizing and generating them. We present quantitative results of a two-part study using a corpus of spontaneous, narrative monologues. The first part of our paper presents a method for empirically validating multitutterance units ...

9 Personalization from incomplete data: what you don't know can hurt

Balaji Padmanabhan, Zhiqiang Zheng, Steven O. Kimbrough

August 2001 **Proceedings of the seventh ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available: pdf(810.80 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Clickstream data collected at any web site (site-centric data) is inherently incomplete, since it does not capture users' browsing behavior across sites (user-centric data). Hence, models learned from such data may be subject to limitations, the nature of which has not been well studied. Understanding the limitations is particularly important since most current personalization techniques are based on site-centric data only. In this paper, we empirically examine the implications of learning from ...

Keywords: Incomplete data, clickstream data, data preprocessing, learning, personalization, probabilistic clipping

10 Networks at work: a connectionist approach to non-deductive legal reasoning

G. J. van Opdorp, R. F. Walker, J. A. Schrickx, C. Groendijk, P. H. van den Berg

May 1991 **Proceedings of the third international conference on Artificial intelligence and law**

Full text available: pdf(1.03 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

11 Cluster ensembles ---- a knowledge reuse framework for combining multiple partitions

Alexander Strehl, Joydeep Ghosh

March 2003 **The Journal of Machine Learning Research**, Volume 3

Full text available: pdf(842.50 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper introduces the problem of combining multiple partitionings of a set of objects into a single consolidated clustering *without* accessing the features or algorithms that determined these partitionings. We first identify several application scenarios for the resultant 'knowledge reuse' framework that we call *cluster ensembles*. The cluster ensemble problem is then formalized as a combinatorial optimization problem in terms of shared mutual information. In addition to a direct ...

Keywords: cluster analysis, clustering, consensus functions, ensemble, knowledge reuse, multi-learner systems, mutual information, partitioning, unsupervised learning

12 Latent semantic models for collaborative filtering

Thomas Hofmann

January 2004 **ACM Transactions on Information Systems (TOIS)**, Volume 22 Issue 1


Full text available:  [pdf\(250.03 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Collaborative filtering aims at learning predictive models of user preferences, interests or behavior from community data, that is, a database of available user preferences. In this article, we describe a new family of model-based algorithms designed for this task. These algorithms rely on a statistical modelling technique that introduces latent class variables in a mixture model setting to discover user communities and prototypical interest profiles. We investigate several variations to deal wi ...

13 Case recognition and strategy classification

Cees Groendijk, Anja Oskamp

August 1993 **Proceedings of the fourth international conference on Artificial intelligence and law**


Full text available:  [pdf\(943.06 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

In a conventional expert system shell, the process of automated reasoning is generally determined by four components: the current fact situation, a goal, the content of the knowledge base, and control knowledge. This paper focuses on control knowledge. The approach taken is to obtain control knowledge from precedents which resemble the current fact situation. Control knowledge, which is here understood as both referring to search and strategy, is important because control knowledge: 1.-faci ...

14 Information extraction as a basis for high-precision text classification

Ellen Riloff, Wendy Lehnert

July 1994 **ACM Transactions on Information Systems (TOIS)**, Volume 12 Issue 3

Full text available:  [pdf\(2.79 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

We describe an approach to text classification that represents a compromise between traditional word-based techniques and in-depth natural language processing. Our approach uses a natural language processing task called "information extraction" as a basis for high-precision text classification. We present three algorithms that use varying amounts of extracted information to classify texts. The relevancy signatures algorithm uses linguistic phrases; the a ...

Keywords: information extraction, text classification

15 Segregating heap objects by reference behavior and lifetime

Matthew L. Seidl, Benjamin G. Zorn

October 1998 **Proceedings of the eighth international conference on Architectural support for programming languages and operating systems**, Volume 33, 32 Issue 11, 5

Full text available:  [pdf\(1.56 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)


Dynamic storage allocation has become increasingly important in many applications, in part due to the use of the object-oriented paradigm. At the same time, processor speeds are increasing faster than memory speeds and programs are increasing in size faster than

memories. In this paper, we investigate efforts to predict heap object reference and lifetime behavior at the time objects are allocated. Our approach uses profile-based optimization, and considers a variety of different information sources ...

16 Training algorithms for linear text classifiers

David D. Lewis, Robert E. Schapire, James P. Callan, Ron Papka

August 1996 **Proceedings of the 19th annual international ACM SIGIR conference on Research and development in information retrieval**


Full text available:  [pdf\(1.02 MB\)](#)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

17 Finding factors: learning to classify case opinions under abstract fact categories

Stefanie Brüninghaus, Kevin D. Ashley

June 1997 **Proceedings of the sixth international conference on Artificial intelligence and law**

Full text available:  [pdf\(1.27 MB\)](#)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

18 Learning with mixtures of trees

Marina Meila, Michael I. Jordan

September 2001 **The Journal of Machine Learning Research**, Volume 1

Full text available:  [pdf\(400.02 KB\)](#)

Additional Information: [full citation](#), [abstract](#)

This paper describes the mixtures-of-trees model, a probabilistic model for discrete multidimensional domains. Mixtures-of-trees generalize the probabilistic trees of Chow and Liu (1968) in a different and complementary direction to that of Bayesian networks. We present efficient algorithms for learning mixtures-of-trees models in maximum likelihood and Bayesian frameworks. We also discuss additional efficiencies that can be obtained when data are "sparse," and we present data structures and algorithms ...

19 Context-sensitive learning methods for text categorization

William W. Cohen, Yoram Singer

August 1996 **Proceedings of the 19th annual international ACM SIGIR conference on Research and development in information retrieval**


Full text available:  [pdf\(992.08 KB\)](#)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

20 Launching the new era

Kazuhiro Fuchi, Robert Kowalski, Koichi Furukawa, Kazunori Ueda, Ken Kahn, Takashi Chikayama, Evan Tick

March 1993 **Communications of the ACM**, Volume 36 Issue 3

Full text available:  [pdf\(3.45 MB\)](#)

Additional Information: [full citation](#), [references](#), [index terms](#), [review](#)

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

training and task and state and hypothetical and predict and neural



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

training and task and state and hypothetical and predict and neural

Found 48,610 of 141,345

 Sort results
by

relevance

 Display
results

expanded form


[Save results to a Binder](#)

[Search Tips](#)
☐ Open results in a new window

[Try an Advanced Search](#)
[Try this search in The ACM Guide](#)

 Results 21 - 40 of 200 Result page: [previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

 Relevance scale ☐ ☐ ☐ ☐ ☐

21 [Towards an effective cooperation of the user and the computer for classification](#)

Mihael Ankerst, Martin Ester, Hans-Peter Kriegel

 August 2000 **Proceedings of the sixth ACM SIGKDD international conference on Knowledge discovery and data mining**

 Full text available: [pdf \(1.55 MB\)](#)

 Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

22 [Categorical imperative NOT: facial affect is perceived continuously](#)

Diane J. Schiano, Sheryl M. Ehrlich, Kyle Sheridan

 April 2004 **Proceedings of the 2004 conference on Human factors in computing systems**

 Full text available: [pdf \(374.31 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Facial affect (or emotion) recognition is a central issue for many VMC and naturalistic computing applications. Most computational models assume "categorical perception" of facial affect, in which a benign illusion promotes robust recognition of emotional expressions even under severe degradation conditions, including temporal compression. However, this applied interest in human facial affect perception is coming at a time when the evidence for categorical perception is being challenged in the b ...

Keywords: VMC, affect, affective computing, avatars, emotion, face, facial affect, facial expression of emotion, naturalistic computing, nonverbal communication, video compression

23 [Neural methods for dynamic branch prediction](#)

Daniel A. Jiménez, Calvin Lin

 November 2002 **ACM Transactions on Computer Systems (TOCS)**, Volume 20 Issue 4

 Full text available: [pdf \(540.67 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


This article presents a new and highly accurate method for branch prediction. The key idea is to use one of the simplest possible neural methods, the perceptron, as an alternative to the commonly used two-bit counters. The source of our predictor's accuracy is its ability to use long history lengths, because the hardware resources for our method scale linearly, rather than exponentially, with the history length. We describe two versions of perceptron predictors, and we evaluate these predictors ...

Keywords: Branch prediction, neural networks

24 Online Choice of Active Learning Algorithms

Yoram Baram, Ran El-Yaniv, Kobi Luz

June 2004 **The Journal of Machine Learning Research**, Volume 5



Full text available:  [pdf\(1.43 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This work is concerned with the question of how to combine online an ensemble of active learners so as to expedite the learning progress in pool-based active learning. We develop an active-learning master algorithm, based on a known competitive algorithm for the multi-armed bandit problem. A major challenge in successfully choosing top performing active learners online is to reliably estimate their progress during the learning session. To this end we propose a simple maximum entropy criterion th ...

25 TextTiling: segmenting text into multi-paragraph subtopic passages

Marti A. Hearst

March 1997 **Computational Linguistics**, Volume 23 Issue 1


Full text available:  [pdf\(2.46 MB\)](#)  Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)
[Publisher Site](#)

TextTiling is a technique for subdividing texts into multi-paragraph units that represent passages, or subtopics. The discourse cues for identifying major subtopic shifts are patterns of lexical co-occurrence and distribution. The algorithm is fully implemented and is shown to produce segmentation that corresponds well to human judgments of the subtopic boundaries of 12 texts. Multi-paragraph subtopic segmentation should be useful for many text analysis tasks, including information retrieval and ...

26 Inductive modelling in law: example based expert systems in administrative law

Jørgen Karpf


May 1991 **Proceedings of the third international conference on Artificial intelligence and law**

Full text available:  [pdf\(1.11 MB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

27 The principled design of large-scale recursive neural network architectures--dag-rnns and the protein structure prediction problem

Pierre Baldi, Gianluca Pollastri

December 2003 **The Journal of Machine Learning Research**, Volume 4

Full text available:  [pdf\(231.40 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)


We describe a general methodology for the design of large-scale recursive neural network architectures (DAG-RNNs) which comprises three fundamental steps: (1) representation of a given domain using suitable directed acyclic graphs (DAGs) to connect visible and hidden node variables; (2) parameterization of the relationship between each variable and its parent variables by feedforward neural networks; and (3) application of weight-sharing within appropriate subsets of DAG connections to capture s ...

28 Adaptation in automated user-interface design

Jacob Eisenstein, Angel Puerta

January 2000 **Proceedings of the 5th international conference on Intelligent user interfaces**

Full text available: Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index](#)

 pdf(1.28 MB)

[terms](#)

Design problems involve issues of stylistic preference and flexible standards of success; human designers often proceed by intuition and are unaware of following any strict rule-based procedures. These features make design tasks especially difficult to automate. Adaptation is proposed as a means to overcome these challenges. We describe a system that applies an adaptive algorithm to automated user interface design within the framework of the MOBI-D (Model-Based Interface Designer) interface ...

Keywords: decision trees, interface models, machine learning, model-based interface development, theory refinement, user interface development tools

29 [Developing computational models of discretion to build legal knowledge based systems](#)

Yaakov HaCohen Kerner, Uri Schild, John Zeleznikow

June 1999 **Proceedings of the seventh international conference on Artificial intelligence and law**

Full text available:  pdf(861.20 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Few legal knowledge based systems have been constructed which provide numerical advice. None have been built in discretionary domains. Our research, directed towards the domains of sentencing and family law property division has lead to the development of three distinct forms of judicial discretion. To model these different discretionary domains we use diverse artificial intelligence tools including case-based reasoning and knowledge discovery from databases. We carry out a detai ...

Keywords: classifying discretionary domains, dicretion, evaluation, explanation, learning from cases

30 [Strategic directions in simulation research \(panel\)](#)

Ernest H. Page, David M. Nicol, Osman Balci, Richard M. Fujimoto, Paul A. Fishwick, Pierre L'Ecuyer, Roger Smith


December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation--- a bridge to the future - Volume 2**

Full text available:  pdf(90.73 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

31 [Activity monitoring: noticing interesting changes in behavior](#)

Tom Fawcett, Foster Provost

August 1999 **Proceedings of the fifth ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available:  pdf(1.19 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

32 [Evidence-based static branch prediction using machine learning](#)

Brad Calder, Dirk Grunwald, Michael Jones, Donald Lindsay, James Martin, Michael Mozer, Benjamin Zorn

January 1997 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 19 Issue 1

Full text available:  pdf(515.50 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Correctly predicting the direction that branches will take is increasingly important in today's wide-issue computer architectures. The name program-based branch prediction is given to

static branch prediction techniques that base their prediction on a program's structure. In this article, we investigate a new approach to program-based branch prediction that uses a body of existing programs to predict the branch behavior in a new program. We call this approach to program-based ...

Keywords: branch prediction, decision trees, machine learning, neural networks, performance evaluation, program optimization

33 Tools for World Wide Web based legal decision support systems

Andrew Stranieri, John Yearwood, John Zeleznikow

May 2001 **Proceedings of the 8th international conference on Artificial intelligence and law**

Full text available:  [pdf\(100.86 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The majority of legal knowledge based systems (LKBS) in commercial use are rule based and target domains of law characterized by large and complex statutes where modelling discretion is not a central concern. Furthermore, to date, few LKBS execute on the World Wide Web. Despite this, LKBS designed for a web environment can make law more universally accessible and transparent. Tools required to facilitate the development of web based systems include a web based expert system shell, conceptual ...

34 Learning precise timing with lstm recurrent networks

Felix A. Gers, Nicol N. Schraudolph, Jürgen Schmidhuber

March 2003 **The Journal of Machine Learning Research**, Volume 3

Full text available:  [pdf\(378.27 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


The temporal distance between events conveys information essential for numerous sequential tasks such as motor control and rhythm detection. While Hidden Markov Models tend to ignore this information, recurrent neural networks (RNNs) can in principle learn to make use of it. We focus on Long Short-Term Memory (LSTM) because it has been shown to outperform other RNNs on tasks involving long time lags. We find that LSTM augmented by "peephole connections" from its internal cells to its multiplicat ...

Keywords: long short-term memory, recurrent neural networks, timing

35 The integration of retrieval, reasoning and drafting for refugee law: a third generation legal knowledge based system

John Yearwood, Andrew Stranieri

June 1999 **Proceedings of the seventh international conference on Artificial intelligence and law**

Full text available:  [pdf\(983.63 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We identify an argument to be the basic unit of reasoning of a system that supports the construction of arguments and drafting of determinations in refugee law. Collaboration with the Refugee Review Tribunal of Australia has led to the development of a framework for argument construction that includes over 200 generic arguments. However, these arguments may not encompass all arguments used in any particular case. The construction of non-generic arguments involves the integration of informat ...


Keywords: argument structure, document drafting, information retrieval, reasoning

36

Subspace clustering for high dimensional data: a review

Lance Parsons, Ehtesham Haque, Huan Liu

June 2004 **ACM SIGKDD Explorations Newsletter**, Volume 6 Issue 1

Full text available:  [pdf\(539.13 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)


Subspace clustering is an extension of traditional clustering that seeks to find clusters in different subspaces within a dataset. Often in high dimensional data, many dimensions are irrelevant and can mask existing clusters in noisy data. Feature selection removes irrelevant and redundant dimensions by analyzing the entire dataset. Subspace clustering algorithms localize the search for relevant dimensions allowing them to find clusters that exist in multiple, possibly overlapping subspaces. The ...

Keywords: clustering survey, high dimensional data, projected clustering, subspace clustering

37 Learning behavior-selection by emotions and cognition in a multi-goal robot task

Sandra Clara Gadanho

December 2003 **The Journal of Machine Learning Research**, Volume 4

Full text available:  [pdf\(592.69 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The existence of emotion and cognition as two interacting systems, both with important roles in decision-making, has been recently advocated by neurophysiological research (LeDoux, 1998, Damasio, 1994). Following that idea, this paper presents the ALEC agent architecture which has both emotive and cognitive learning, as well as emotive and cognitive decision-making capabilities to adapt to real-world environments. These two learning mechanisms embody very different properties which can be related ...

38 Special issue on special feature: Distributional word clusters vs. words for text categorization

Ron Bekkerman, Ran El-Yaniv, Naftali Tishby, Yoav Winter

March 2003 **The Journal of Machine Learning Research**, Volume 3


Full text available:  [pdf\(176.53 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

We study an approach to text categorization that combines distributional clustering of words and a Support Vector Machine (SVM) classifier. This word-cluster representation is computed using the recently introduced *Information Bottleneck* method, which generates a compact and efficient representation of documents. When combined with the classification power of the SVM, this method yields high performance in text categorization. This novel combination of SVM with word-cluster representation ...

39 Round robin classification

Johannes Fürnkranz

March 2002 **The Journal of Machine Learning Research**, Volume 2

Full text available:  [pdf\(250.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we discuss round robin classification (aka pairwise classification), a technique for handling multi-class problems with binary classifiers by learning one classifier for each pair of classes. We present an empirical evaluation of the method, implemented as a wrapper around the Ripper rule learning algorithm, on 20 multi-class datasets from the UCI database repository. Our results show that the technique is very likely to improve Ripper's classification accuracy without having a hi ...

Keywords: class binarization, ensemble techniques, inductive rule learning, multi-class problems, pairwise classification

40 [Pac-bayesian generalisation error bounds for gaussian process classification](#)

Matthias Seeger

March 2003 **The Journal of Machine Learning Research**, Volume 3Full text available:  [pdf\(487.11 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Approximate Bayesian Gaussian process (GP) classification techniques are powerful non-parametric learning methods, similar in appearance and performance to support vector machines. Based on simple probabilistic models, they render interpretable results and can be embedded in Bayesian frameworks for model selection, feature selection, etc. In this paper, by applying the PAC-Bayesian theorem of McAllester (1999a), we prove distribution-free generalisation error bounds for a wide range of approxima ...

Keywords: Bayesian learning, Gaussian processes, Gibbs classifier, Kernel machines, PAC-Bayesian framework, convex duality, generalisation error bounds, sparse approximations

Results 21 - 40 of 200

Result page: [previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

Home	Quick	Advanced	Pat Num	Help
Bottom		View Cart		

Searching 1790 to present...

Results of Search in 1790 to present db for:

(((((training AND task) AND state) AND hypothetical) AND predict) AND neural): 40 patents.

Hits 1 through 40 out of 40

[Jump To](#)

[Refine Search](#)

PAT. NO.	Title
1 6,754,589	T System and method for enhanced hydrocarbon recovery
2 6,743,167	T Method and system for predicting human cognitive performance using data from an actigraph
3 6,740,032	T Method and system for predicting human cognitive performance
4 6,731,964	T Processed neural signals and methods for generating and using them
5 6,691,045	T Method for determining discrete quantitative structure activity relationships
6 6,678,548	T Unified probabilistic framework for predicting and detecting seizure onsets in the brain and multitherapeutic device
7 6,658,396	T Neural network drug dosage estimation
8 6,640,145	T Media recording device with packet data interface
9 6,594,524	T Adaptive method and apparatus for forecasting and controlling neurological disturbances under a multi-level control
10 6,581,048	T 3-brain architecture for an intelligent decision and control system
11 6,578,017	T Method to aid object detection in images by incorporating contextual information
12 6,574,565	T System and method for enhanced hydrocarbon recovery
13 6,496,814	T Method and system for integrating spatial analysis, and scheduling to efficiently schedule and monitor infrastructure maintenance
14 6,460,036	T System and method for providing customized electronic newspapers and target advertisements
15 6,421,612	T System, method and computer program product for identifying chemical compounds having desired properties
16 6,418,424	T Ergonomic man-machine interface incorporating adaptive pattern recognition based control system
17 6,416,480	T Method and apparatus for automated acquisition of the glasgow coma score (AGCS)
18 6,411,903	T System and method for delineating spatially dependent objects, such as hydrocarbon accumulations from seismic data
	T

- 19 [6,400,996](#) [Adaptive pattern recognition based control system and method](#)
- 20 [6,356,884](#) [T Device system for the autonomous generation of useful information](#)
- 21 [6,330,546](#) [T Risk determination and management using predictive modeling and transaction profiles for individual transacting entities](#)
- 22 [6,236,942](#) [T System and method for delineating spatially dependent objects, such as hydrocarbon accumulations from seismic data](#)
- 23 [6,169,981](#) [T 3-brain architecture for an intelligent decision and control system](#)
- 24 [6,132,724](#) [T Allelic polygene diagnosis of reward deficiency syndrome and treatment](#)
- 25 [6,115,701](#) [T Neural network-based target seeking system](#)
- 26 [6,081,750](#) [T Ergonomic man-machine interface incorporating adaptive pattern recognition based control system](#)
- 27 [6,078,901](#) [T Quantitative supply and demand model based on infinite spreadsheet](#)
- 28 [6,051,559](#) [T Cloning and characterizing of genes associated with long-term memory](#)
- 29 [6,029,195](#) [T System for customized electronic identification of desirable objects](#)
- 30 [6,018,727](#) [T Device for the autonomous generation of useful information](#)
- 31 [5,901,246](#) [T Ergonomic man-machine interface incorporating adaptive pattern recognition based control system](#)
- 32 [5,875,108](#) [T Ergonomic man-machine interface incorporating adaptive pattern recognition based control system](#)
- 33 [5,835,087](#) [T System for generation of object profiles for a system for customized electronic identification of desirable objects](#)
- 34 [5,828,776](#) [T Apparatus for identification and integration of multiple cell patterns](#)
- 35 [5,819,226](#) [T Fraud detection using predictive modeling](#)
- 36 [5,799,276](#) [T Knowledge-based speech recognition system and methods having frame length computed based upon estimated pitch period of vocalic intervals](#)
- 37 [5,754,939](#) [T System for generation of user profiles for a system for customized electronic identification of desirable objects](#)
- 38 [5,754,938](#) [T Pseudonymous server for system for customized electronic identification of desirable objects](#)
- 39 [5,701,400](#) [T Method and apparatus for applying if-then-else rules to data sets in a relational data base and generating from the results of application of said rules a database of diagnostics linked to said data sets to aid executive analysis of financial data](#)
- 40 [5,659,666](#) [T Device for the autonomous generation of useful information](#)

